

REMARKS

This responds to the Office Action dated February 20, 2008.

Claims 18-36, 46, and 47 are now pending in this application.

§103 Rejection of the Claims

Claims 18-24, 26, 28-36 and 46-47 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Cookson et al. (U.S. Patent No. 7,167,209 B2) in view of Barton et al. (U.S. Patent No. 6,215,526 B1).

Applicants respectfully submit that the Office Action did not make out a *prima facie* case of obviousness in connection with any of the above rejections because even if combined, the cited references fail to teach or suggest all of the elements of Applicants' claimed invention.

The references when combined must teach or suggest all the claim elements. M.P.E.P. § 2142 (citing *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed.Cir. 1991)).

Cookson discloses a method of encoding based on the Veil encoding where encoding is performed by "increasing the average luminance of one line in a field and decreasing the average luminance of the next adjacent line." See Col lines 61-64. Cookson teaches grouping lines in a field of a video signal together to maintain modulation during "up res'ing" and "down res'ing". Col 2 lines 12-14. Cookson does not teach or suggest altering total luminance of a frame or a field of a frame. Rather, the total luminance of the group, field or frame in Cookson remains constant.

The Examiner asserts that FIGS. 3(A) and 3(B) reflect that "the total luminance of the group, field or frame in Cookson does not remained constant..." In FIG. 3(A), "the luminance level on each of the lines is controlled by a sinusoidal function with a full period of 8 lines that boosts and reduces the average horizontal luminance by up to 10%." See Col 3 lines 53-56 (emphasis added). "The gain applied to each line by [the sinusoidal] function is ..." 6%, 10%, 9%, 3%, -3%, -9%, -10%, and -6%. See Col 3 line 60 – Col 4 line 7. By adding the applied gain of 6 + 10 + 9 + 3 + -3 + -9 + -10 + -6, the resulting change in gain over the area of encoding

consisting of the eight lines is 0. Thus, FIG. 3(A) reflects no alteration to the total luminance of a particular group, field, or frame.

In FIG. 3(B), the “data is encoded using a sawtooth function to control the change (sp) in average luminance in each of the N lines.” See Col 4 lines 8-12. “[T]he gain applied to each line by such a function is ...” 2.5%, 5%, 7.5%, 10%, -10%, -7.5%, -5%, and -2.5%. By adding the applied gain of $2.5 + 5 + 7.5 + 10 + -10 + -7.5 + -5 + -2.5$, the resulting change in gain over the area of encoding consisting of the eight lines is 0. Thus, FIG. 3(B) reflects no alteration to the total luminance of a particular group, field, or frame.

The Examiner also asserts that the total luminance of Cookson does not remain constant based on disclosure relating to FIG. 6 of Cookson. FIG. 6 of Cookson relates to “a removal device” that may be used to “remove the encoding from a composite video signal”. See Col 2 lines 48-49 and Col 5 lines 15-20. The removal device may be used by “someone attempting to circumvention content protection signaling...” See Col 5 lines 11-14. Thus, the asserted disclosure relates to removal of encoding as opposed to the claimed methods of producing a modulated video signal from a video signal.

The described method of removing encoding in Cookson is by generating “a waveform that is the inverse of the VEIL encoding scheme.” See Col 5 lines 33-35. The described example VEIL encoding scheme “the average is raised by 10% on the first of two adjacent scans and lowered by 10% on the second of two field adjacent lines.” See Col 5 lines 37-40. To remove the encoding, the removal device “decrease[s] [the] gain to 0.9 (10% down from unity) for the first line and increase[s] [the] gain to 1.1 (10% up from unity) for the second line.” See Col 5 lines 40-44. Thus, the first line that originally had its average gain raised by 10% had its average again decreased by 10% from the remove device and the second line that had its average gain lowered by 10% had its gain increased by 10% from the removal dev ice. The result of the application of the removal device in FIG. 6 to an encoded signal is a signal without removed data encoding. See Col 5 lines 10-12. As described above, the result is achieved not achieved by changing total luminance of a particular group, field, or frame.

Cookson and Barton both fail to teach:

1. “producing a modulated video signal by raising luminance of a first frame and lowering luminance of a second frame of the plurality of frames in a substantially invisible way, wherein the raising of the luminance of the first frame increases total luminance of the first frame and the lowering of the luminance of the second frame decreases the total luminance of the second frame” of claim 18,
2. “altering intensity of at least two frames of the plurality of frames to encode the digital video signal, wherein the intensity of the at least two frames are each altered by a different intensity amount so that each of the at least two frames has a different total intensity than the other frame” of claim 33,
3. “encoding a signal presence in the digital video signal by increasing luminance of a first frame of the plurality of frames and decreasing luminance of a second frame of the plurality of frames in a substantially invisible way, the first frame and the second frame being consecutive frames of the plurality of frames, wherein the increasing of the luminance of the first frame increases total luminance of the first frame and the decreasing of the luminance of the second frame decreases the total luminance of the second frame” of claim 35, and
4. “produce a modulated video signal by raising luminance of a first frame and lowering luminance of a second frame of the plurality of frames, wherein the raising of the luminance of the first frame increases total luminance of the first frame and the lowering of the luminance of the second frame decreases the total luminance of the second frame” of claim 46.

See page 34 lines 4-22 and page 35 lines 14-20.

Applicants submit that a dependent claim incorporates each of the claim elements of the independent claim from which it properly depends, and more. Applicants assert for the reasons stated above, that neither Cookson nor Barton teach or suggest¹ all of the claim elements of dependent claims 19-24, 26, 28-32, 34, 36, and 47.

¹ The references when combined must teach or suggest all the claim elements. M.P.E.P. § 2142 (citing *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed.Cir. 1991)).

In conclusion, Applicants reaffirm the position that Cookson and Barton, when combined, do not teach or suggest all of the claim elements of claims 18-24, 26, 28-36, and 46-47 and accordingly respectfully request that the rejection under 35 U.S.C. §103(a) be withdrawn.

Claim 25 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Cookson et al. (U.S. Patent No. 7,167,209 B2) in view of Barton et al. (U.S. Patent No. 6,215,526 B1) as applied to claim 18 above, and further in view of Schwab et al. (U.S. Patent Application Publication No. 2008/0030614 A1).

Applicants assert for at least the reasons stated in the prior section, that Cookson and Barton do not teach or suggest² all of the claim elements of claims 25 and the Office Action's proposed combination with Schwab does not cure the defect. Therefore, Applicant respectfully request withdrawal of the §103(a) rejection and allowance of claim 25.

Claim 27 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Cookson et al. (U.S. Patent No. 7,167,209 B2) in view of Barton et al. (U.S. Patent No. 6,215,526 B1) as applied to claim 18 above, and further in view of Barton et al. (U.S. Patent Application Publication No. 2007/0230921 A1).

Applicants assert for at least the reasons stated in the prior section, that Cookson and Barton do not teach or suggest all of the claim elements of claims 27 and the Office Action's proposed combination with Barton II does not cure the defect. Therefore, Applicant respectfully request withdrawal of the §103(a) rejection and allowance of claim 27.

Reservation of Rights

In the interest of clarity and brevity, Applicants may not have equally addressed every assertion made in the Office Action, however, this does not constitute any admission or acquiescence. Applicants reserve all rights not exercised in connection with this response, such as the right to challenge or rebut any tacit or explicit characterization of any reference or of any of the present claims, the right to challenge or rebut any asserted factual or legal basis of any of the rejections, the right to swear behind any cited reference such as provided under 37 C.F.R. § 1.131 or otherwise, or the right to assert co-ownership of any cited reference. Applicant does not

² The references when combined must teach or suggest all the claim elements. M.P.E.P. § 2142 (citing *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed.Cir. 1991)).

admit that any of the cited references or any other references of record are relevant to the present claims, or that they constitute prior art. To the extent that any rejection or assertion is based upon the Examiner's personal knowledge, rather than any objective evidence of record as manifested by a cited prior art reference, Applicants timely object to such reliance on Official Notice, and reserves all rights to request that the Examiner provide a reference or affidavit in support of such assertion, as required by MPEP § 2144.03. Applicants reserve all rights to pursue any cancelled claims in a subsequent patent application claiming the benefit of priority of the present patent application, and to request rejoinder of any withdrawn claim, as required by MPEP § 821.04.

AMENDMENT AND RESPONSE UNDER 37 CFR § 1.116 – EXPEDITED PROCEDURE

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Title: METHOD AND SYSTEM OF DETECTING SIGNAL PRESENCE FROM A VIDEO SIGNAL PRESENTED ON A DIGITAL
DISPLAY DEVICE

CONCLUSION

Applicants respectfully submit that the claims are in condition for allowance and notification to that effect is earnestly requested. The Examiner is invited to telephone Applicants' attorney 636-681-1324 to facilitate prosecution of this application.

If necessary, please charge any additional fees or credit overpayment to Deposit Account No. 19-0743.

Respectfully submitted,

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Date July 18, 2008

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CERTIFICATE UNDER 37 CFR 1.8: The undersigned hereby certifies that this correspondence is being filed using the USPTO's electronic filing system EFS-Web, and is addressed to: Commissioner of Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on this 18 day of July 2008.

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